

wherein said controller is configured so that a language of the input assistant, a current date and a current time of day, a type of connection of said device to a telecommunication network, an exchange code or a factor for charge calculation can be set as operating parameters with the assistance of said automatic input assistant.

17. (Amended) The telecommunication terminal device according to claim 16, wherein said telecommunication terminal device is a digital terminal device by which said controller is constructed such that said controller permits multiple telephone numbers of said telecommunication terminal device or suppression of a transmission of a telephone number of its own telecommunication terminal device to another party can be set with the assistance of said automatic input assistant.

#### REMARKS

The present Amendment revises the specification and claims to conform to United States patent practice, before examination of the present PCT application in the United States National Examination Phase. Pursuant to 37 CFR 1.125 (b), applicants have concurrently submitted a substitute specification, excluding the claims, and provided a marked-up copy. All of the changes are editorial and applicant believes no new matter is added thereby. The amendment, addition, and/or cancellation of claims is not intended to be a surrender of any of the subject matter of those claims.

Early examination on the merits is respectfully requested.

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Appendix A  
Mark Ups for Claim Amendments

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1. ~~[Method]~~**(Amended) A method** for commissioning a telecommunication terminal device, ~~[whereby]~~ **comprising the steps of:**  
**providing an input mechanism for said device; and**  
**setting** operating parameters for a subsequent operation of ~~[the telecommunication terminal device can be set]~~ **said** by an operator via ~~[input means (2-9, 13) at the telecommunication terminal]~~ **said input mechanism at said device,** ~~[characterized in that the setting of the operating parameters ensues]~~ assisted by an automatic input assistant that automatically guides ~~[the]~~ **said** operator through ~~[the]~~ **said** setting of ~~[the]~~ **said** operating parameters.
2. ~~[Method]~~**(Amended) The method** according to claim 1, ~~[characterized in that]~~ **further comprising the step of:**  
**presenting** values that have been already previously set for ~~[the]~~ **said** operating parameters to be set ~~[are presented to the]~~ **to said** operator as standard values~~[,];~~ **and**  
**accepting or erasing, by** said operator ~~[being able to accept the]~~, **said** standard values by a corresponding actuation of ~~[the input means (2-9, 13) or, on the other hand, being able to erase them and reset the]~~ **said input mechanism,** **said erasing thus resetting said** operating parameters.

3. ~~[Method]~~**(Amended) The method** according to claim 1 ~~[-or 2, characterized in that the-], further comprising the step of prompting, by said~~ automatic input assistant ~~[prompts the operator], said operator~~ to set ~~[the] said~~ operating parameters with the assistance of input or selection masks that are presented on a display ~~[(1) of the telecommunication terminal]~~ **of said** device.

4. ~~[Method]~~**(Amended) The method** according to claim 3, ~~[characterized in that the-]~~**further comprising the steps of:**  
**presenting, on said display, said** input or selection masks of ~~[the] said~~ automatic input assistant ~~[are presented on the display (1) of the telecommunication terminal device]~~ according to a predetermined ~~[hierarchical system, so that, dependent on the]~~ **hierarchical system; and**  
**presenting, on said display, other** input or selection ~~[of the] masks,~~  
**depending on said input or selection of said** operator upon presentation of an input or selection mask, ~~[a specific, other input or selection mask is presented on the display (1)]~~ according to ~~[the] said~~ hierarchic system.

5. ~~[Method]~~**(Amended) The method** according to claim 4, ~~[characterized in that the-]~~**further comprising the step of recalling, by said** operator ~~[can recall], a~~ previously displayed input or selection mask **based** on ~~[the basis of]~~ a corresponding input.

6. ~~[Telecommunication]~~**(Amended) A telecommunication** terminal device, comprising:  
**an** input ~~[means (2-9, 13)] mechanism~~ for an operator to set operating parameters of ~~[the telecommunication terminal device, characterized by control means (10, 15)]~~ **said device;**  
**a controller** for supporting ~~[the] said~~ operator in ~~[the] setting [of the] said~~ operating parameters ~~[with the assistance of]; and~~

an automatic input assistant that assists said controller in order to automatically guide ~~[the]~~ said operator through ~~[the]~~ setting ~~[of the]~~ said operating parameters.

5 7. ~~[Telecommunication]~~**(Amended) The telecommunication** terminal device according to claim 6, ~~[characterized in that the telecommunication terminal device comprises]~~ **further comprising** a display ~~[(1)]~~ for a presentation of input or selection masks controlled by ~~[the control means (10, 15), whereby the]~~ said controller, by which said operator is prompted to set corresponding operating parameters by ~~[the]~~ said input or selection masks.

8. ~~[Telecommunication]~~**(Amended) The telecommunication** terminal device according to claim 7, ~~[characterized in that the control means (10, 15) are fashioned such that they]~~ **wherein said controller is configured to** present ~~[the]~~ said input or selection masks on ~~[the]~~ said display ~~[(1)]~~ according to a predetermined ~~[hierarchy]~~ **hierarchical** system, so that, given presentation of a specific input or selection mask and dependent on an input or selection of ~~[the]~~ said operator via ~~[the]~~ said input ~~[means (2-9),]~~ **mechanism**, a new **other** input or selection mask predetermined by ~~[the hierarchy]~~ **said hierarchical** system is presented on ~~[the display (1).]~~ said display.

~~[9. Telecommunication]~~ 9. **(Amended) The telecommunication** terminal device according to claim 7 ~~[or 8, characterized in that the control means (10, 15) are fashioned]~~, **wherein said controller is configured** such that an input or selection mask that was already previously displayed is redisplayed on ~~[the]~~ said display ~~[(1)]~~ ~~by the control means (10, 15)]~~ **by said** as a result of a corresponding input of ~~[the]~~ said operator via ~~[the input means (2-9).]~~ **said input mechanism**.

~~[10. Telecommunication]~~ 10. **(Amended) The telecommunication** terminal device according to ~~[one of the claims 7-9, characterized in that the control means~~

(10, 15) are fashioned] claim 7, wherein said controller is configured such that  
[they recognize] it recognizes a waiting call for [the telecommunication terminal]  
said device and [present] presents an input or selection mask on [the] said display  
[(1) in this case] with whose assistance [the] said operator can select [the] a  
5 continuation of [the] setting [of the] said operating parameters or, on the other  
hand, the] an acceptance of [the] said call via [the input means (2-9), whereby the  
control means (10, 15) produce the] said input mechanism, said controller  
producing an abort of [the] said setting [procedure] of said operating parameters  
and of [the] said input assistant given an input of [the] said operator corresponding  
10 to [the] call acceptance.

11. ~~[Telecommunication]~~(Amended) The telecommunication terminal device  
according to ~~[one of the claims 7-9, characterized in that the control means (10, 15)~~  
~~are fashioned such that they]~~ claim 7, wherein said controller is configured to  
15 recognize a call waiting for ~~[the telecommunication terminal]~~ said device and  
automatically ~~[produce the]~~ produces an abort of [the] said setting [procedure] of  
said operating parameters and of [the] said input assistant in [this case in] order to  
enable [the] an acceptance of [the] said call, [whereby] said settings of operating  
parameters that have already been actuated by [the] said operator [remain]  
20 remaining stored.

12. ~~[Telecommunication]~~(Amended) The telecommunication terminal device  
according to ~~[one of the claims 7-11, characterized in that the control means (10-15)~~  
~~are fashioned]~~ claim 7, wherein said controller is configured such that, given  
25 presentation of an input or selection mask on ~~[the display (1) of the~~  
~~telecommunication terminal device, they display]~~ said display, said controller  
displays values for [the] corresponding operating parameters that were already  
previously set and ~~[offer]~~ offers these to [the] said operator for acceptance.

13. ~~[Telecommunication]~~**(Amended) The telecommunication** terminal device according to ~~[one of the claims 6-12, characterized in that the input means (2-9, 13) comprise]~~ **claim 6, wherein said input mechanism comprises** a keyboard ~~[(13)]~~ of ~~[the]~~ **said** telecommunication terminal device.

5

14. ~~[Telecommunication]~~**(Amended) The telecommunication** terminal device according to ~~[one of the claims 6-13, characterized in that the control means (10, 15) are fashioned]~~ **claim 6, wherein said controller is configured** such that, following a power-free condition of ~~[the telecommunication terminal]~~ **said** device, ~~[the recognize the]~~ **said controller recognizes a** connection or~~[, respectively,]~~ **a** reconnection of ~~[the telecommunication terminal]~~ **said** device to a power supply and~~[, in this case, start the]~~ **starts said** automatic input assistant for setting ~~[the]~~ **said** operating parameters.

15. ~~[Telecommunication]~~**(Amended) The telecommunication** terminal device according to claim 14, ~~[characterized in that the control means (10, 15) are fashioned]~~ **wherein said controller is configured** such that, when the automatic input assistant is started, ~~[they present]~~ **it presents** an input or selection mask on ~~[the]~~ **said** display ~~[(1) of the telecommunication terminal device]~~ with whose assistance ~~[the]~~ **said** operator can confirm ~~[the]~~ **a** continuation of ~~[the]~~ setting ~~[of the]~~ **said** operating parameters or~~[, on the other hand,]~~ abort ~~[the]~~ **said** setting of ~~[the]~~ **said** operating parameters.

16. ~~[Telecommunication]~~**(Amended) The telecommunication** terminal device according to ~~[one of the claims 6-15, characterized in that the control means (10, 15) are fashioned such that the]~~ **claim 6, wherein said controller is configured so that a** language of the input assistant, ~~[the]~~ **a** current date and ~~[the]~~ **a** current time of day, ~~[the]~~ **a** type of connection of ~~[the telecommunication terminal]~~ **said** device to a telecommunication network, ~~[the]~~ **an** exchange code ~~[and/or]~~ **or** a factor for ~~[the]~~

charge calculation can be set as operating parameters with the assistance of ~~the~~ **said** automatic input assistant.

17. ~~[Telecommunication]~~**(Amended) The telecommunication** terminal device  
5 according to claim 16, ~~[characterized in that the]~~ **wherein said** telecommunication  
terminal device is a digital terminal device~~[, whereby the control means (10, 15) are  
fashioned]~~ **by which said controller is constructed** such that **said controller**  
**permits** multiple telephone numbers of ~~[the]~~ **said** telecommunication terminal device  
~~[and/or the]~~ **or** suppression of ~~[the]~~ **a** transmission of ~~[the]~~ **a** telephone number of its  
10 own telecommunication terminal device to another party can be set with the  
assistance of ~~[the]~~ **said** automatic input assistant.

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## SPECIFICATION

### TITLE

METHOD FOR COMMISSIONING A TELECOMMUNICATION TERMINAL DEVICE  
AND A CORRESPONDING TELECOMMUNICATION TERMINAL DEVICE

## BACKGROUND OF THE INVENTION

### Field of the Invention

**1** The present invention is directed to a method for commissioning a telecommunication terminal device such as~~[-, for example,]~~ a traditional telephone, a mobile telephone or a cordless telephone, as well as to a telecommunication terminal device that, in particular, can **also** be utilized in telephone private branch exchanges ~~[as well,]~~.

### ~~[As known,]~~ Description of the Related Art

**2** **It is known that** a user can set certain operating parameters at his telephone set that subsequently define the operation of the telephone set. ~~[the]~~ **The** setting of the operating parameters ~~[thereby ensues]~~ **is accomplished** by inputting corresponding codes that are to be input via the keyboard of the telephone set. ~~[The]~~ **Furthermore, the** setting of the codes~~[-, further,]~~ is displayed on the display **(if present)** of the telephone set ~~[insofar as a corresponding display is present. For example].~~ **These operating parameters include, e.g.,** the ringing frequency, the ringing volume or the exchange code (AKZ) to be pre-selected for external calls given operation at a telephone private branch exchange, etc., **which** can ~~[thus]~~ be set or programmed ~~[as operating parameters]~~. Such a programming of the telephone sets, however, is relatively complicated since a corresponding code must



be input for each setting of an operating parameter, but the user must usually look this up in the handbook of the telephone set since he cannot remember the ~~[multitude]~~ **large number** of different setting codes.

3 In order to facilitate the commissioning of the telephone set for the final  
5 consumer, the most important operating parameters are normally pre-programmed by the manufacturer with the assistance of pre-set standard values (default values)~~],~~  
~~whereby these pre-settings]~~ **that** cover a majority of the employment areas.  
Nonetheless, applications often occur that are not covered by these pre-settings, so that the user must again carry out the ~~[aforementioned]~~ **previously mentioned**,  
10 complicated reprogramming of the telephone set.

### **SUMMARY OF THE INVENTION**

4 The present invention is therefore based on the object of ~~[proposing]~~  
**providing** a method for the commissioning of a telecommunication terminal device  
15 as well as a corresponding telecommunication terminal device with which the commissioning of the telecommunication terminal device can be made easier for the final consumer or~~], respectively,]~~ **final user (user)**.

5 This object is achieved by ~~[the present invention with]~~ a method ~~[having the features of claim 1 or, respectively,]~~ **for commissioning** a telecommunication  
20 terminal device ~~[having the features of claim 6. The subclaims respectively describe preferred and advantageous embodiments of the present invention that in turn contribute to an optimally simple commissioning of the telecommunication terminal device by the final consumer in that,]~~ **comprising the steps of providing an input mechanism for the device; and setting operating parameters for a subsequent**  
25 **operation of the by an operator via the input mechanism at the device, assisted by an automatic input assistant that automatically guides the operator through**  
the setting of the ~~[various]~~ operating parameters ~~[is facilitated in a user-friendly way.].~~ **Advantageous developments are described below.**

6 **This object is also achieved by a telecommunication terminal device,**  
30 **comprising an input mechanism for an operator to set operating parameters of the device; a controller for supporting the operator in setting the operating parameters; and an automatic input assistant that assists the controller in order to automatically guide the operator through setting the operating**

parameters.

7 According to the present invention, an automatic input prompting is provided that guides the user ~~[or final consumer]~~ through the most important operating parameter settings and thus supports the programming of the operating parameters  
5 by the user. This automatic input prompting can~~[, in particular,]~~ **particularly** be realized in the form of a software assistant in the telecommunication terminal device that is automatically activated as soon as the telecommunication terminal device is connected to the power supply. It can also be provided that this software assistant is automatically re-activated after a power outage in order to ~~[thus]~~ enable ~~[a]~~ resetting  
10 ~~[of]~~ the operating parameters by a user.

8 The automatic input prompting proposed according to the present invention or~~[, respectively, the aforementioned]~~ **the previously mentioned** software assistant is particularly realized such that various input or selection masks are automatically displayed on the display of the telecommunication terminal device according to a  
15 predetermined ~~[hierarchie]~~ **hierarchical** system, these prompting the user to set corresponding operating parameters. The setting of the respective operating parameters can occur by selecting a predetermined option or by inputting a corresponding value. After an input or selection by the user, the automatic input prompting automatically changes according to the ~~[aforementioned hierarchie]~~  
20 **previously mentioned hierarchical** system to a new input or selection mask in order to enable the setting of a new operating parameter. An ~~[input of the]~~ operator ~~[thereby]~~ **input then** advantageously ~~[ensues]~~ **takes place** via the keyboard of the telecommunication terminal device. When earlier settings of the corresponding operating parameters are already present when the automatic prompting or~~[, respectively,]~~  
25 ~~respectively,~~ the software assistant is called, these are displayed in the corresponding input or selection masks or~~[, respectively,]~~ display screens as predetermined, standard or default values, so that the operator can simply accept these values, as warranted.

9 When a call arrives at the corresponding telecommunication terminal device  
30 during the ~~[aforementioned]~~ **previously mentioned**, automatic setting procedure, i.e., after activation of the automatic input prompting, the operator is given an opportunity with a corresponding display screen at the respective telecommunication terminal device to: **1)** accept the call or, ~~[on the other hand,]~~ **2)** continue the setting

procedure. On the basis of a corresponding input, usually by actuating a corresponding key (soft key), the operator can accept the call, ~~[whereby]~~ **in which case** the setting procedure is aborted ~~[in this case]~~ and the software assistant or, ~~respectively,~~ the automatic input prompting is placed into a quiescent condition.

5 Alternatively, ~~[it can be provided to]~~ **incoming calls may** always **be** given ~~[incoming calls]~~ priority **by default**, so that the setting procedure is automatically aborted upon arrival of a call in order to be able to accept the incoming call. Advantageously, the settings that have already been made remain stored in this case.

10 **10** The present invention can be applied to various types of telecommunication terminal ~~[device]~~ **devices**. In particular, the invention can be applied both to terminal devices directly connected to a main telephone terminal as well as to terminal devices connected to a telephone private branch exchange. ~~[Further, use of]~~ **Furthermore**, the present invention ~~[comes into consideration]~~ **may be used** both in analog or digital, stationary telephone sets as well as in mobile telephones such  
15 as, ~~[for example,]~~ cordless telephones.

#### **BRIEF DESCRIPTION OF THE DRAWINGS**

20 **11** The present invention is explained in greater detail below on the basis of preferred exemplary embodiments with reference to the attached ~~[drawing-]~~ **drawings**.

~~[By way of example, Figures 1a and 1b show]~~ **Figures 1A and 1B** **are exemplary screen displays showing** the execution of the setting of operating parameters according to the present invention for an analog telephone terminal device on the basis of various display screens.

25 ~~[By way of example, Figures 2a-2c show]~~ **Figures 2A-2D** **are exemplary screen displays showing** the execution of the setting of operating parameters according to the present invention for ~~[an]~~ **a** digital telephone terminal device on the basis of various display screens.

Figure 3 **[shows] is a [simplified] block circuit diagram [of] showing** an  
30 inventive telecommunication terminal device.

#### **DESCRIPTION OF THE PREFERRED EMBODIMENTS**

**12** First, the structure of an inventive telecommunication terminal device ~~[shall be]~~ **is** explained on the basis of Figure 3 with reference to the example of a stationary terminal device. The central component part is a central control unit 10 that controls the function of the telecommunication terminal device such as~~[, for example,]~~ the reception or~~[, respectively, the]~~ transmission of communication information via a **connected** telephone network (not shown) ~~[connected thereto]~~ and, for this purpose, is also coupled to the loudspeaker 11 and the microphone 12 of the telephone. ~~[In particular, however]~~ **However**, the central control unit 10 also **particularly** serves for the control of the input or~~[, respectively,]~~ setting of operating parameters by an operator. This ensues with the assistance of an input assistant whose functional scope such as~~[, for example,]~~ the nature of the operating parameters to be set or the sequence of the setting of the individual operating parameters is defined by the software 15 of the central control unit 10.

**13** After activation of this input assistant, various input or selection masks, with whose assistance the operator can~~[, in particular,]~~ **particularly** actuate corresponding inputs or settings via the keyboard 13 of the terminal device, are displayed on the display 1 of the terminal device ~~[dependent]~~ **depending** on the control software 15. Instead of the keyboard 15, and as ~~[shall be]~~ **is** explained later, the actuation of ~~[what are referred to as soft keys]~~ **"soft keys"** is also possible, for example, as **an** input medium for the setting/input of operating parameters. Values that have been input or set for the individual operating parameters are deposited in a corresponding memory 14~~[, for example in an EEPROM,]~~ **(e.g., an EEPROM)** in order, on the one hand, to access these **values** later during operation of the telecommunication terminal device or, on the other hand, to be able to store new values for the operating parameters.

**14** Figure ~~[1a]~~ **1A** shows the content 100 of a display screen 1 of the inventive analog telephone terminal device after activation of the software or~~[, respectively,]~~ input assistant.

**15** The input assistant is automatically activated when the telephone terminal device is connected to a power supply or is resupplied with power after a power outage. I.e., an activation of the input assistant can only be achieved via a **power supply** mains outage or by unplugging and replugging the power plug of the telephone terminal device. Advantageously, the user is not allowed to plug in a

telephone line during the commissioning of the telephone terminal device but only the power plug, so that incoming calls can have priority over initial device settings. Only after running through the setting procedure, for example, can it be pointed out to the user in the instruction manual that the telephone line should be plugged in.

5 **16** With the display screen 100 shown in Figure [4a] **1A**, the telephone terminal device first asks the user or~~[, respectively,]~~ the operator whether the input assistant should in fact be started for setting various operating parameters of the telephone terminal device. The input possibilities are presented to the user in display fields 2 or~~[, respectively,]~~ 3, so that the setting procedure with support by the input assistant  
10 is started by actuating a key ~~[{YES@}]~~**("YES"** key) allocated to the field 2, whereas the setting procedure is aborted and switched into a quiescent condition by actuating a key ~~[{NO@}]~~**("NO"** key) allocated to the field 3.

**17** After actuation of the ~~[{YES@}]~~**"YES"** key, the selection mask or~~[, respectively,]~~ selection presentation 200 shown in Figure [4a] **1A** is displayed on the  
15 display of the telephone terminal device. With the assistance of the selection presentation 200, the user can select the language for the following installation or~~[, respectively,]~~ setting procedure. With the assistance of a key allocated to the display field 5 shown in Figure [4a] **1A**, the bar shown black in the display 200 can be displaced up, whereas this bar can be displaced down with the assistance of a key  
20 allocated to the display field 6. The language selected at ~~[the moment]~~ **any particular time** is shown over the background of the black bar. Finally, the user can confirm the selection with the assistance of a key ~~[{OK@}]~~**("OK"** key) allocated to the field 4.

**18** After actuating the ~~[{OK@}]~~**"OK"** key, the message 300 shown in Figure [4a]  
25 **1A** is output on the display of the telephone terminal device, this prompting the user to set the current date and the current time of day. By actuating the ~~[{OK@}]~~**"OK"** key, an input mask 301 is displayed on the display ~~[wherein]~~ **in which** the user can input the date and the time of day with the assistance of the number keys of the telephone terminal device~~[. The]~~ **at which** input ~~[thereby ensues]~~ **takes place** with  
30 the assistance of a cursor that indicates the momentary input position in the input mask. This cursor can be shifted toward the left with the assistance of a key corresponding to the field 7 shown in Figure [4a] **1A** and can be shifted toward the right with the assistance of a key corresponding to the field 8. The field 9 likewise

shown in the display 301 has a backspace function key allocated to it, the cursor being shifted one field toward the left when this is actuated and the momentary input field being deleted at the same time. The input of the data and the time of day can again be confirmed by the user with the assistance of the [AOK@]"OK" key.

5     **19**     Subsequently, the software assistant automatically displays a new message 400 on the display of the telephone terminal device with which the user is informed about the setting of the type of connection of the telephone terminal device that is to be actuated next. By actuating the [AOK@]"OK" key, the selection mask 401 shown in Figure [1a] **1A** is displayed on the display of the telephone terminal device,  
10     ~~[whereby]~~ **at which** a black bar can again be displaced up or down for selecting between the given options. When the user has selected [Aextension@]"extension" as ~~the~~ connection type and subsequently actuates the [AOK@]"OK" key of the telephone terminal device, the performance feature [Aautomatic]"automatic attenuation [Aequalization@]"equalization" (ADA) is preferably activated and a  
15     change to a new message 402 on the display of the telephone terminal device ensues via which the user is informed of the input of the exchange code to be carried out next, i.e., the number to be dialed for external calls in order to access the exchange line. The user can ~~[thereby]~~ select whether he wishes to input this exchange code (AKZ) or not. When the user has actuated the key of the telephone  
20     terminal device corresponding to the [AYES@]"YES" field, an input mask 403 is displayed on the display of the telephone terminal device into which the user can input a three digit exchange code via the number keys of the telephone terminal device.

25     **20**     When, ~~[given]~~ **for** the display of the selection mask 401, the user has selected the option [Amain-line@]"main line" (in this case, the feature [AADA@]"ADA" is deactivated) or has actuated the [AOK@]"OK" key ~~[given]~~ **for a** display of the input mask 403 or, ~~respectively,~~ has actuated the key corresponding to the option [ANO@-given]"NO" **for a** display of the selection window 402, then a further selection option 500 is displayed on the display of the telephone terminal device,  
30     ~~whereby the question is asked]~~ **which asks** whether the user wishes to input a fee or payment factor that represents the basis for the calculation of charges for the calls conducted proceeding from the corresponding telephone terminal device. After actuation of the key allocated to the option [AYES@]"YES", a message 501 is

displayed that informs the user about the input of the display format for the payment factor that is to be actuated next. After actuation of the ~~[AOK@]~~“OK” key, a new selection mask 502 is finally displayed, ~~[whereby]~~ **by which** the user can select the display format for the payment factor by moving the black bar shown in the display  
5 502 up or down. The selection can in turn be confirmed by actuating the ~~[AOK@]~~“OK” key, ~~[whereby]~~ **producing** an input mask 503 **that** is subsequently displayed on the display of the telephone terminal device ~~[wherein]~~ **at which** the user can input the desired payment factor for the charge calculation with the number keys of the telephone terminal device. A currency input does not thereby ~~[ensue]~~  
10 **occur**. When a payment factor was input, the payment display is automatically activated in the telephone terminal device.

**21** The input mask 503 is in turn exited by actuating the ~~[AOK@]~~ key. ~~It is assumed in the example shown in Figures 1a/1b]~~“OK” key. **Figures 1A/1B assume** that the installation, i.e., the setting of the operating parameters of the  
15 telephone terminal device, has ended, and a corresponding message 600 is displayed on the display of the telephone terminal device. For confirming the end of the installation event, a specific sound sequence or melody can also be optionally output via the loudspeaker of the telephone terminal device or a specific animation can be presented on the display.

**22** Of course, the present invention is not limited to the setting possibilities shown in Figure ~~[1a]~~ **1A** and Figure ~~[1b]~~ **1B**; rather, additional or other operating parameters of the telephone terminal device can also be set, such as ~~[, for example,]~~ the ringing volume, the ringing sequence, etc., supported by the automatic input or software assistant. This is essentially dependent only on the control of the software of the  
20 telephone terminal device.

**23** It can be seen from Figures ~~[1a]~~ **1A** and ~~[1b]~~ **1B** that **the sequencing of the automatic input control [sequences] takes place** according to a pre-programmed and predetermined ~~[hierarchical]~~ **hierarchical** system. By actuating a corresponding key of the telephone terminal device (soft key actuation), the display screen of the  
25 telephone terminal device changes and a new selection or input mask is displayed until the installation is over. These transitions are shown in Figure ~~[1a]~~ **1A** and Figure ~~[1b]~~ **1B** with the assistance of solid-line arrows. Additionally, however, there is also the possibility of returning from a display screen to a preceding or  
30

~~respectively,~~ hierarchically higher-ranking display screen in order, for example, to correct incorrect inputs. These returns are shown with broken-line arrows in Figures ~~[1a]~~ **1A** and ~~[1b]~~ **1B** and are produced by actuation of an ESC key (ESC hard key) of the telephone terminal device. For example, a return can be made from the display screen 500 to the display screen 400 in this way.

~~[It has already been explained that the]~~ **24**     **The** automatic setting procedure, i.e., the automatic software or~~, respectively,~~ **the** input assistant, is always activated when the telephone terminal device is connected to the power supply or~~, respectively,~~ is resupplied with power after a power outage. Accordingly, the setting procedure and, thus, the input assistant is automatically exited when no input has been actuated for a longer time, for example, 2 minutes. Settings that have already been actuated remain stored and are thus preserved. Over and above this, there is also the possibility of exiting the input procedure by: **1)** picking up the receiver and in turn hanging up the receiver, or~~, respectively,~~ **2)** by correspondingly turning the loudspeaker of the telephone terminal device on and then off, which corresponds to an emergency reset.

**25**     As a rule, a telephone terminal device is already delivered with predetermined standard or default settings of the individual operating parameters. These default settings are preferably accepted by the input assistant in the presentation of a corresponding display screen and offered to the user for confirmation, so that no new input by the user may be required when the predetermined default settings are accepted. The same is also true of operating parameters that had already been set by the user earlier. When the user does not agree with these earlier settings of the operating parameters, a resetting or re-selection can be undertaken with a corresponding input via the keyboard of the telephone terminal device, as described above.

**26**     During the activation of the input assistant, i.e., during the running of the setting procedure presented in Figures ~~[1a and 1b, it can occur that]~~ **1A and 1B**, a call ~~[arrives]~~ **may arrive** at the corresponding telephone terminal device. In this case, a corresponding display screen is automatically displayed on the display of the telephone terminal device that informs the user that a call is waiting and indicates the possibility of accepting the call or~~, respectively,~~ continuing with the setting procedure (for example, with soft keys ~~[Accept@]~~ **"accept"** and



~~[Acontinue@]~~“continue”). When the user decides to accept the call, i.e., when the user actuates the corresponding accept key, the setting procedure and the automatic input assistant is aborted and the user can accept the call. When, in contrast, the user has decided to continue the setting procedure, the display screen that informed the user of the waiting call is erased and a return is made to the preceding display screen.

**27** Alternatively, ~~[it can be provided that]~~ incoming calls may always be given priority, so that the setting procedure is automatically aborted upon arrival of a call in order to be able to accept the incoming call. Advantageously, the settings that have already been actuated remain stored in this case.

**28** Figures ~~[2a-2c]~~ **2A-2D** show a setting procedure for an ISDN telephone terminal device corresponding to the setting procedure shown in Figures ~~[1a/1b]~~ **1A/1B**. The display screens 100-403 shown in Figure ~~[2a]~~ **2A** correspond to the display screens 100-403 shown in Figure ~~[1a]~~ **1A**, so that the above explanations are referenced here.

**29** In contrast to analog telephone terminal devices, however, there is the possibility ~~[given]~~ for ISDN telephone terminal devices of allocating a plurality of telephone numbers to an ISDN terminal. After the display screens 401-403, a new selection mask 500 is therefore displayed~~[,]~~ by which the user ~~[being]~~ is asked ~~[via this]~~ whether the input of such multiple telephone numbers is desired. Upon actuation of the ~~[AYES@]~~“YES” key, the user can subsequently input a total of three such multiple telephone numbers in corresponding input masks 501-503 with the number keys of the telephone terminal device. After actuation of the ~~[AOK@]~~“OK” key when the input mask 503 is displayed or~~[, respectively,]~~ after selection of the ~~[ANO@]~~“NO” option when the selection mask 500 is displayed, the setting procedure for the payment factor that was already described on the basis of Figure ~~[1b]~~ **1B** follows, so that the above explanations about the display screens 500-503 of Figure ~~[1b]~~ **1B** can be referenced.

**30** When, upon presentation of the display screen 600, the user has selected the ~~[ANO@]~~“NO” option or~~[, respectively,]~~ input the desired payment factor into the input mask 603 and subsequently actuated the ~~[AOK@]~~“OK” key, a further selection mask 700 (see Figure ~~[2c]~~ **2D**) is displayed on the display of the telephone terminal device, with whose assistance the user can activate or deactivate what is referred to

as the CLIR performance feature (calling line identification restriction) of the ISDN telephone terminal device in order to thus suppress the transmission of the [user=s] user's own telephone number to the other party [given] for an activation of the CLIR performance feature. Upon actuation of the [AYES@] "YES" key, accordingly, the

5 CLIR performance feature is activated, whereas, [given] for an actuation of the [ANO@] "NO" key, the setting procedure is immediately ended and the final message shown in Figure [2c] 2D is displayed on the display of the telephone terminal device. The above comments about the display screen 600 shown in Figure [1b] 1B in turn apply to the display screen 800. [~~Of course, the~~] The setting

10 procedure shown in Figures [2a-2c] 2A-2D is also not all-inclusive but only to be understood as being by way of example; additional or alternative operating parameters such as, for example the activation of a calling list or the activation of a call redirection, etc., can also be set.

15 [Abstract] 31 The above-described method and device are illustrative of the principles of the present invention. Numerous modifications and adaptations thereof will be readily apparent to those skilled in this art without departing from the spirit and scope of the present invention.

~~[METHOD FOR COMMISSIONING A TELECOMMUNICATION TERMINAL DEVICE  
AND A CORRESPONDING TELECOMMUNICATION TERMINAL DEVICE]~~

**ABSTRACT**

~~[Method]~~ **32** A method is provided for commissioning a telecommunication  
5 terminal device as well as a corresponding telecommunication terminal device,  
~~[whereby]~~ by which a plurality of operating parameters of the telecommunication  
terminal device for commissioning can be set by an operator via the keyboard (2-9)  
of the telecommunication terminal device. The setting of the operating parameters is  
supported by an automatic input assistant that prompts the operator to set  
10 corresponding operating parameters in the form of a plurality of input or selection  
masks and thus guides the operator through the setting procedure.  
~~[Figures 1a, 1b]~~